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Student Experience in Optometry Education in Mozambique: Initial Challenges in an International Collaborative Program

Kajal Shah
Technological University Dublin, kajshah@aol.com

MOZAMBIQUE EYECARE PROJECT

Student Experience in Optometry Education in Mozambique: Initial challenges in an international collaborative program

Shah, K.[1], Naidoo, K. [2,3], Loughman, J. [1,2].
[1] Optometry Department, Dublin Institute of Technology, [2] International Centre for Eyecare Education, Durban, [3] African Vision Research Institute, Durban.

Introduction

The Mozambique Eyecare Project, a collaboration between the Dublin Institute of Technology (DIT), International Centre of Eyecare Education (ICEE), the University of Ulster (UU) and the University of Lurio (UL), is developing and implementing a sustainable model for optometric education and eyecare service delivery in University of Lurio in Mozambique.

The project aims to train Mozambique's first professional optometrists, who will be part of a sustainable and comprehensive eyecare system as an integral part of the national health system.[1]

Aim

The aim of this research is to analyse the model of optometric education by evaluating the student experience and relating it to student performance, with a view to:

a) creating best practise in the education of health professionals in a developing world environment. [2,3,4]

b) informing the course coordinators and partners on how to better structure and develop the educational programme and course.

Methods

Results from the questionnaire and interviews were analysed in relation to exam results to determine if student performance was affected by student experience.

Questionnaire: A questionnaire was completed by the first cohort (A) of 16 optometry students in relation to five course modules, and by a second cohort (B) of 24 students in relation to a single module. The questions asked the students to rate their experience of the module, the lecturer and the assessments.

Interviews: Semi-structured focus group interviews were carried out with the 40 students from the two cohorts and the first two members of faculty. The interviews aimed to get qualitative information about the strengths and weaknesses of the modules.

Figure 1: Optometry student in clinic

Results

a) Questionnaire

i)Rating of the module

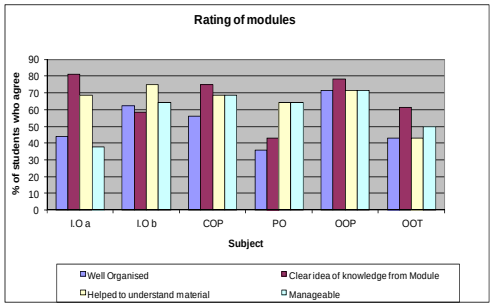

Figure 2: Bar graph showing student rating of modules.
Introduction to Optometry (I O a) for Cohort A and (I O b) for Cohort B; Clinical Optometric Procedures (COP); Physiological Optics (PO); Ophthalmic Optics Theory (OOT); and Ophthalmic Optics Practical (OOP).

ii) Rating of the lecturer

% of students who agree/strongly agree for module	I.O a Cohort A	I.O b Cohort B	COP Cohort A	PO Cohort A	OOT Cohort A	OOP Cohort A
Lecturer was well prepared.	75	54.2	100	92.9	100	78.5
Lectures were well delivered	43.8	58.3	81.1	71.4	92.9	50
Understand the language used in these lectures.	25	54.2	50	74.2	57.2	57.1
Appropriate use of teaching resources	75	66.6	93.8	85.7	92.9	78.5
Encouraged questions and class discussion.	75	58.3	68.8	85.7	92.9	71.4
Available to offer support outside of lecture times.	93.8	41.7	81.3	92.9	85.8	57.1
Gave feedback on my progress	68.8	58.3	81.3	64.3	85.8	64.3
Made clear the objectives of the module	81.3	54.2	68.8	71.4	78.6	71.5

Figure 3: Table showing student rating of lecturer

iii) Rating of assessments

% of students who agree/ strongly agree for module	I.O a Cohort A	I.O b Cohort B	COP Cohort A	PO Cohort A	OOT Cohort A	OOP Cohort A
A schedule and description of module assessments was provided at the beginning of the module	6.3	37.5	43.8	64.3	57.1	50
Instructions on assessment tasks were clear and specific.	18.8	50	68.8	57.1	85.7	64.3
Assessment tasks were returned within a reasonable time frame.	56.3	29.2	87.5	64.3	78.6	64.3
The lecturer provided constructive feedback on tests and assignments	43.8	50	62.6	71.5	85.7	71.4
Felt confident about the final end of semester exam.	31.3	50	62.6	78.6	78.5	50
Good link between what we learn in the module and how we are assessed.	75	50	81.1	50	92.8	71.5
The way my progress is assessed gives a fair reflection of my knowledge	62.5	66.7	74.9	78.6	85.7	71.4

Figure 4: Table showing student rating of assessments

b) Interviews

Three themes emerged:

a)*Student and lecturer preparation for the module*: None of the students had any prior knowledge of Optometry or the nature of the course before they began. One of the faculty had no prior experience of teaching.

b) *Language*: All the students have Portuguese as their first language. 3 out of 5 students from Cohort A said they did not understand the language of the notes (English). All 10 students said they understood the language used by lecturer (a mix of Spanish and Portuguese).

c) *Lecturer support*: The overall response from both cohorts was that the tutor was very good at explaining concepts that were completely new to them.

Figure 5a and b: Students being assessed

Analysis

Student interviews and feedback suggested a concern about language of instruction and the lack of prior knowledge and experience of Optometry. However, analysis suggests that this did not make significant difference to performance (see figure 6).

n= total number of students	Introduction to Optometry (I.O a) Cohort A n=16	Introduction to Optometry (I.O b) Cohort B n=26	Clinical Optometric Procedures (COP) Cohort A n=16	Physiological Optics (PO) Cohort A n=16	Ophthalmic Optics Theory (OOT) Cohort A n=16	Ophthalmic Optics Practical (OOP) Cohort A n=16
Average mark (%)	73.45	62.5	63.35	66.5	72.5	79.5
Standard deviation	14.1	11.6	10.45	12.95	10.3	16.4
Pass rate	100%	88.5%	81.3%	87.5%	87.5%	87.5%

Figure 6: Table showing exam results

More significant explanation of student performance seems to have been the level and quality of support and feedback given to students by lecturer. Where the lecturer was less available (due to class size or other teaching commitments) students fared worse.

Conclusions

•Overall lecturer support and feedback seems to have the greatest effect on student performance.
•The evaluation has helped the partners to recruit and retain multilingual lecturers and to ensure they understand the importance of supporting students.
•It has assisted the module writers to develop international curriculum for developing countries where few students if any have any knowledge of Optometry.
•Evaluations on how these challenges will affect the overall clinical competencies of the students when they graduate is still on going. The first students will graduate in December 2012 and have their clinical competencies assessed in relation to World Council Of Optometry competencies. This research will inform the course coordinators and partners on how to better structure and develop their educational programme.

References

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For further information

Please contact *kajshah@aol.co.uk*. More information on this and related projects can be obtained at *www.mozeyecare.org*

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